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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,321	04/22/2004	Hyun-Sook Kim	1594.1351	5667
21171 7590 02/12/2008 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER HECKERT, JASON MARK	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 02/12/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/829,321

Applicant(s)

KIM ET AL.

Examiner

JASON HECKERT

Art Unit

1792

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-19 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 and 25-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 18, 19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/5/07 has been entered.

Response to Arguments

2. Applicant's arguments filed 12/13/07 in regards to Imamura have been fully considered but they are not persuasive. Considering little to no structure is given to the limitation of a water supplier, the examiner interprets a water supplier as all the devices in the apparatus that inject or supply water. Note that applicant's claims only include language such that the water supplier includes two pipes, and that the water is directly supplied from the pipes. The water supplier of Imamura includes a first pipe connected to valve 9 directly supplying water to the tub, and a second pipe 12 directly injecting water into the drum. Thus, Imamura discloses the apparatus as claimed.

3. Applicant's arguments, see page 9-10, filed 12/5/07, with respect to the rejections regarding Kwon in view of Sumner have been fully considered and are persuasive. The rejection has been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 6-10, 18-19, 21 rejected under 35 U.S.C. 103(a) as being

unpatentable over Imamura et al. (Imamura) in view of Sumner et al (Sumner).

Imamura discloses a washing machine with a tub 2, a perforated spin basket (or drum) 3, drive motor 5, water supply valve 9, circulation pump 111 connected to pipe 12 and nozzle 13, an electric heater 11, temperature sensor 24, control means 31, and key input means 35. The water supplier of Imamura includes a first pipe connected to valve 9 directly supplying water to the tub, and a second pipe 12 directly injecting water into the drum (see figure 14). Thus, Imamura discloses the apparatus as claimed. The control means is a microcomputer that controls the motor, heater, water supply, and receives input from the key input and temperature sensor. The control circuitry is able to determine temperatures, and determine whether or not a certain temperature is met (figure 12). Although Imamura discloses a drum coupled to a drive shaft, a front opening, and perforations, Imamura does not disclose a tilted drum with perforations on the front wall. Sumner discloses a tilted drum for a washing machine that has a perforated front wall (figures 1 and 2). It would have been obvious at the time of the invention, to use any known drum construction and orientation, such as a tilted drum with a perforated front wall as taught by Sumner, in place of Imamura's drum, as they are known constructions that allow fluid to drain during washing and rinsing operations.

6. Claims 11, 22-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura in view Sumner and further in view of Noguchi et al. (Noguchi). Imamura

discloses a control circuit means 31 and key input 35 operated by the user. Imamura also teaches that the control means can manipulate the temperature via the heater 11. Imamura does not distinctly disclose a storage or memory unit, however various storage means such as RAM and ROM are common in the art and are generally implemented and inherent in many control circuits and their inclusion cannot be considered novel. Furthermore, Noguchi teaches the use of RAM and ROM in the control circuitry of a washing machine to control various steps of washing. Other publications that reference storing temperatures and using stored data for washing machine control include but are not limited to U.S. Patent 6,499,321 to Rhodes et al., U.S. Patent 6,269,506 to Hollatz et al., U.S. Patent 6,003,182 to Song, and U.S. Patent 5,388,299 to Lee. It would have been obvious at the time of the invention to modify Imamura in view of Sumner, as stated above, and further include some type of storage memory in the control circuitry, as taught by Noguchi, to control various wash steps that are either preprogrammed or entered by the user. As stated previously, Imamura discloses an electric heater. In regards to the control circuitry, examiner believes that it would be capable of operating in the same way.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5,768,730 to Matsumoto et al. Disclosed are three pipe portions 123A injecting fluid to a washing machine directly from the water supplier, as well as a circulating device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HECKERT whose telephone number is (571)272-2702. The examiner can normally be reached on Mon. to Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1792

JMH

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